



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4

61 Forsyth Street
Atlanta, Georgia 30303-3104

July 21, 2020

4SEMD-SSS

MEMORANDUM

SUBJECT: Record of Decision, Environmental Management Disposal Facility,
Oak Ridge, Tennessee

FROM: William N. O'Steen, Physical Scientist
Scientific Support Section
Superfund and Emergency Management Division

WILLIAM
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Date: 2021.07.21
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THROUGH: Tim Frederick, Chief
Scientific Support Section
Superfund and Emergency Management Division

Tim
Frederick

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TO: Carl Froede, Remedial Project Manager
Superfund Restoration and DOE Coordination Section
Superfund and Emergency Management Division

This memorandum responds to your request for a review of the **Record of Decision for Comprehensive Environmental Response, Compensation, and Liability Act Oak Ridge Reservation Waste Disposal at the Environmental Management Disposal Facility, Oak Ridge, Tennessee**. For your convenience, comments on this document (hereafter, "the ROD") are referenced to specific sections or pages of the ROD as applicable. If you have any questions about this memorandum or need additional hydrogeologic technical assistance on this project, please contact me.

On page 1-4, the ROD refers to 30 CFR when it should reference parts of 40 CFR.

On page 2-13, text refers to the absence of strike-parallel groundwater contamination in the Nolichucky Shale and Maryville Limestone around the Bear Creek Burial Grounds (BCBG) part of BCV. As noted in prior Remediation Effectiveness Reports and commented upon by EPA, there is an absence of groundwater monitoring in critical areas of the outcrop belts of these formations to the west of the BCBG. Thus, it is inappropriate to cite the groundwater conditions around the BCBG as supporting some conclusion or inference that groundwater contamination would not likely migrate along strike in these formations to the west of the EMDF area.

The second paragraph of Section 2.5.3 should add an explanation for the losing character of the streams. A losing stream implies a karst condition which is inconsistent with the characterization of the EMDF setting presented in Section 2.5.1.

Section 2.12.2.4 refers to a "...wastewater treatment system...sized to accommodate the estimated wastewater volume to be treated and designed to remove contaminants projected to exceed discharge criteria". There should be some statement in the ROD about how the wastewater volume to be treated has been (or will be) estimated and how contaminants projected to exceed discharge criteria have been (or will be) identified.

Any steps planned to minimize leachate or contact water generation during later phases of landfill operation (initial landfill cells filled) should be mentioned in the appropriate part of Section 2.12.2.

The last paragraph of Section 2.12.2.6 refers to baseline groundwater monitoring. There is a further statement in the paragraph about monitoring other water, but no indication of baseline monitoring of surface water, which would seem to be another area where baseline monitoring should occur.

Section 2.14.1 discusses several aspects of having a rail loading facility and rail line hauling waste that would be incompatible with ongoing and anticipated or potential redevelopment of the ETPP area. A part of one statement in this section reads "...daily hauling of radioactive waste is inconsistent with the development of the National Historic Park." This statement is unquestionably factual but would it not likewise in some sense apply to the removal and hauling of waste material and soils by truck from at least some of the same source areas to the EMDF? If so, then citing the movement of radioactive or other waste materials by rail as a negative aspect of the off-site disposal option would seem to be a misplaced argument for favoring onsite over offsite disposal unless it is presented in a comparative analysis to the waste handling and hauling elements of the onsite disposal option.

cc: Tim Frederick, Chief, SSS (electronic copy)